

Application No. 10/519,201
Amendment Dated June 30, 2006

I. Amendment:

In the claims

This listing of claims will replace all prior versions, and listings of claims, in the application:

1. (Currently amended) A method for fabricating a spacer structure, the method comprising:
- a) forming a gate insulation layer having a gate deposition-inhibiting layer, a gate layer and a covering deposition-inhibiting layer on a semiconductor substrate, wherein the gate deposition-inhibiting layer and the covering deposition-inhibiting layer include at least one of a nitride layer and an oxynitride layer;
 - b) patterning the gate layer and the covering deposition-inhibiting layer in order to form gate stacks; and
 - c) depositing an insulation layer selectively with respect to the deposition-inhibiting layers to form the spacer structure[.];
 - d) carrying out an implantation in order to form connection doping regions in the semiconductor substrate;
 - e) depositing a further insulation layer selectively with respect to the deposition-inhibiting layers in order to form a widened spacer structure; and
 - f) carrying out a further implantation in order to form source/drain regions in the semiconductor substrate.

Claims 2-4 (Cancelled)

5. (Currently amended) The method according to claim 1, wherein the ~~deposition-inhibiting layers include~~ at least one of nitride layers and oxynitride layers with have a high nitrogen content, and ozone-enhanced TEOS deposition is carried out in.

6. (Previously presented) The method according to claim 1, wherein the selectively deposited insulation layers side walls of the gate stack have spacer layers and at the deposition-inhibiting layers have thin residual layers, the method comprising removing the residual layers by wet etching.

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7. (Previously presented) The method according to claim 1, further comprising densifying the selectively deposited insulation layers.
8. (Previously presented) The method according to claim 1, further comprising:
 - g) removing the deposition-inhibiting layers in order to uncover the gate layer and the semiconductor substrate;
 - h) depositing a material which can be silicided; and
 - i) converting a surface layer of the uncovered semiconductor substrate and the gate layer using the material which can be silicided in order to form highly conductive connection regions for source/drain regions and the gate layer.
9. (Previously presented) The method according to claim 1, wherein the gate layer includes polycrystalline silicon and the semiconductor substrate includes crystalline silicon.
10. (Cancelled)
11. (Currently amended) The method according to claim 31, wherein the deposition-inhibiting layers include at least one of nitride layers and oxynitride layers with a high nitrogen content, and ozone-enhanced TEOS deposition is carried out in at least one of step c) and step e).
12. (Currently amended) The method according to claim 31, further comprising densifying one of the selectively deposited insulation layers in c) or e).
13. (Currently amended) A method of fabricating a sub-100 nanometer field-effect transistor, the method comprising fabricating a spacer structure, fabrication of the spacer structure comprising:
 - a) forming a gate insulation layer having a gate deposition-inhibiting layer, a gate layer and a covering deposition-inhibiting layer on a semiconductor substrate;
 - b) patterning the gate layer and the covering deposition-inhibiting layer in order to form gate stacks; and

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c) depositing an insulation layer selectively with respect to the deposition-inhibiting layers to form the spacer structure[.];

d) carrying out an implantation in order to form connection doping regions in the semiconductor substrate;

e) depositing a further insulation layer selectively with respect to the deposition-inhibiting layers in order to form a widened spacer structure; and

f) carrying out a further implantation in order to form source/drain regions in the semiconductor substrate, wherein the gate deposition-inhibiting layer and the covering deposition-inhibiting layer include at least one of a nitride layer and an oxynitride layer.

Claims 14-16. (Cancelled)

17. (Currently amended) The method according to claim 13, wherein the ~~deposition-inhibiting layers include~~ at least one of nitride layers and oxynitride layers with have a high nitrogen content, and ozone-enhanced TEOS deposition is carried out in c).

18. (Previously presented) The method according to claim 13, wherein the selectively deposited insulation layers at side walls of the gate stack have spacer layers and at the deposition-inhibiting layers have thin residual layers, the method comprising removing the residual layers by wet etching.

19. (Previously presented) The method according to claim 13, further comprising densifying the selectively deposited insulation layer.

20. (Previously presented) The method according to claim 13, further comprising:

g) removing the deposition-inhibiting layers in order to uncover the gate layer and the semiconductor substrate;

h) depositing a material which can be silicided; and

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i) converting a surface layer of the uncovered semiconductor substrate and the gate layer using the material which can be silicided in order to form highly conductive connection regions for source/drain regions and the gate layer.

21. (Previously presented) The method according to claim 13, wherein the gate layer includes polycrystalline silicon and the semiconductor substrate includes crystalline silicon.

22. (Currently amended) The method according to claim 45 13, wherein the ~~deposition-inhibiting layers include~~ at least one of nitride layers and oxynitride layers with have a high nitrogen content, and ozone-enhanced TEOS deposition is carried out in at least one of step c) and step e).

23. (Currently amended) The method according to claim 45 13, further comprising densifying one of the selectively deposited insulation layers in c) or e).